

IN THE CLAIMS:

Amended claims follow:

1. (Currently Amended) A method for establishing a list of security scanner attributes for a computing node within a hierarchy of computing nodes, the list of security scanner attributes being associated with a security scanner action to be performed by a security scanner program, the method comprising:
 - establishing a hierarchy of lists of attributes, an attribute being comprised of an attribute identifier and an attribute value, the attribute value being comprised of ~~either a list of attributes or a controlling value~~ used by the security scanner program to control an operation of the security scanner program, the list of attributes being comprised of a grouping attribute and a series of one or more attributes;
 - examining the grouping attribute associated with the list of attributes;
 - updating an element of the list of attributes if the grouping attribute indicates that the element may be updated without also updating other elements in the list of attributes;
 - updating the element and all other elements of the list of attributes if the grouping attribute indicates that updating the element requires all other elements to be updated; and
 - updating the element, all other elements, and all subordinate elements of the list of attributes if the grouping attribute indicates that updating the element requires all subordinate elements of the list of attributes to be updated;
 - wherein the grouping attribute is associated with the entire list of attributes for controlling the updating through selection of at least one of at least three scenarios by indicating at least one of:

Docket: NAI1P251_00.088.01

-2-

the element may be updated without also updating other elements in the list of attributes,

updating the element requires all other elements in the list of attributes to be updated, and

updating the element requires all other elements in the list of attributes and all subordinate elements in the list of attributes to be updated;

wherein updating the element involves overwriting the value with another value that may be identical to an original value;

wherein updating the element and all other elements of the list of attributes involves overwriting each value with another value that may be identical to an original value;

wherein updating the element, all other elements in the list of attributes, and all subordinate elements of the list of attributes involves overwriting each value with another value that may be identical to an original value for each element and each subordinate element of the list of attributes;

wherein the attribute value includes a second list of attributes used by the security scanner program to control the operation of the security scanner program;

wherein the second list of attributes includes a second grouping attribute associated with each of the attributes of the second list;

wherein the element of the list of attributes contains an identifier that uniquely identifies the element and a value, wherein the value may itself be a list of elements.

2.-6. (Cancelled)

Docket: NAI1P251_00.088.01

-3-

7. (Currently Amended) The method of claim 21, wherein if the attribute being updated is itself another list of attributes, the grouping attribute can indicate one of:

- the attribute can be updated;
- a content of the list of attributes can be replaced; and
- the other list of attributes can be merged with the list of attributes.

8. (Original) The method of claim 1, wherein the security scanner program performs a scanning process on files associated with the computing node for malicious computer instructions, wherein details of the scanning process are specified by the list of security scanner attributes.

9. (Currently Amended) A computer-readable storage medium storing instructions that when executed by a computer causes the computer to perform a method for establishing a list of security scanner attributes for a computing node within a hierarchy of computing nodes, the list of security scanner attributes being associated with a security scanner action to be performed by a security scanner program, the method comprising:

establishing a hierarchy of lists of attributes, an attribute being comprised of an attribute identifier and an attribute value, the attribute value being comprised of ~~either a list of attributes or a controlling value~~ used by the security scanner program to control an operation of the security scanner program, the list of attributes being comprised of a grouping attribute and a series of one or more attributes;

examining the grouping attribute associated with the list of attributes;

updating an element of the list of attributes if the grouping attribute indicates that the element may be updated without also updating other elements in the list of attributes;

updating the element and all other elements of the list of attributes if the grouping attribute indicates that updating the element requires all other elements to be updated; and

updating the element, all other elements, and all subordinate elements of the list of attributes if the grouping attribute indicates that updating the element requires all subordinate elements of the list of attributes to be updated;

wherein the grouping attribute is associated with the entire list of attributes for controlling the updating through selection of at least one of at least three scenarios by indicating at least one of:

the element may be updated without also updating other elements in the list of attributes,

updating the element requires all other elements in the list of attributes to be updated, and

updating the element requires all other elements in the list of attributes and all subordinate elements in the list of attributes to be updated;

wherein updating the element involves overwriting the value with another value that may be identical to an original value;

wherein updating the element and all other elements of the list of attributes involves overwriting each value with another value that may be identical to an original value;

wherein updating the element, all other elements in the list of attributes, and all subordinate elements of the list of attributes involves overwriting each value with another value that may be identical to an original value for each element and each subordinate element of the list of attributes;

wherein the attribute value includes a second list of attributes used by the security scanner program to control the operation of the security scanner program;

wherein the second list of attributes includes a second grouping attribute associated with each of the attributes of the second list;

wherein the element of the list of attributes contains an identifier that uniquely identifies the element and a value, wherein the value may itself be a list of elements.

10. – 14. (Cancelled)

15. (Currently Amended) The computer-readable storage medium of claim 409, wherein if the attribute being updated is itself another list of attributes, the grouping attribute can indicate one of:

the attribute can be updated;

a content of the list of attributes can be replaced; and

the other list of attributes can be merged with the list of attributes.

16. (Original) The computer-readable storage medium of claim 9, wherein the security scanner program performs a scanning process on files associated with the computing node for malicious computer instructions, wherein details of the scanning process are specified by the list of security scanner attributes.

17. (Currently Amended) An apparatus that facilitates establishing a list of security scanner attributes for a computing node within a hierarchy of computing nodes, the list of security scanner attributes being associated with a security scanner action to be performed by a security scanner program, comprising:

an establishing mechanism that is configured to establish a hierarchy of lists of attributes, an attribute being comprised of an attribute identifier and an

Docket: NAIIP251_00.088.01

-6-

attribute value, the attribute value being comprised of either a list of attributes or a controlling value used by the security scanner program to control an operation of the security scanner program, the list of attributes being comprised of a grouping attribute and a series of one or more attributes;

an examining mechanism that is configured to examine the grouping attribute associated with the list of attributes;

an updating mechanism that is configured to update an element of the list of attributes if the grouping attribute indicates that the element may be updated without also updating other elements in the list of attributes;

wherein the updating mechanism is further configured to update the element and all other elements of the list of attributes if the grouping attribute indicates that updating the element requires all other elements to be updated; and

wherein the updating mechanism is further configured to update the element, all other elements, and all subordinate elements of the list of attributes if the grouping attribute indicates that updating the element requires all subordinate elements of the list of attributes to be updated;

wherein the grouping attribute is associated with the entire list of attributes for controlling the updating through selection of at least one of at least three scenarios by indicating at least one of:

the element may be updated without also updating other elements in the list of attributes,

updating the element requires all other elements in the list of attributes to be updated, and

updating the element requires all other elements in the list of attributes and all subordinate elements in the list of attributes to be updated;

wherein updating the element involves overwriting the value with another value that may be identical to an original value;

wherein updating the element and all other elements of the list of attributes involves overwriting each value with another value that may be identical to an original value;

wherein updating the element, all other elements in the list of attributes, and all subordinate elements of the list of attributes involves overwriting each value with another value that may be identical to an original value for each element and each subordinate element of the list of attributes;

wherein the attribute value includes a second list of attributes used by the security scanner program to control the operation of the security scanner program;

wherein the second list of attributes includes a second grouping attribute associated with each of the attributes of the second list;

wherein the element of the list of attributes contains an identifier that uniquely identifies the element and a value, wherein the value may itself be a list of elements.

18. – 22. (Cancelled)

23. (Currently Amended) The apparatus of claim ~~18~~17, wherein if the attribute being updated is itself another list of attributes, the grouping attribute can indicate one of:

the attribute can be updated;

a content of the list of attributes can be replaced; and

the other list of attributes can be merged with the list of attributes.

24. (Original) The apparatus of claim 17, wherein the security scanner program is configured to perform a scanning process on files associated with the computing node for malicious computer instructions, wherein details of the scanning process are specified by the list of security scanner attributes.

Docket: NA11P251_00.088.01

-8-

25. – 26. (Cancelled)

27. (New) The method of claim 1, wherein the list of security scanner attributes determines the files to be scanned by the security scanner program.

28. (New) The method of claim 27, wherein the list of security scanner attributes further determines a corrective action to take in response to the identification of an infected file.